



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,922	09/30/1999	RANDALL BAIRD	2705-70	6051
20575 7590 05/30/2007 MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			EXAMINER NGUYEN, TOAN D	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/409,922	Applicant(s) BAIRD ET AL.	
	Examiner Toan D. Nguyen	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-29, 31, 33-66, 68 and 70-74 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 21-29, 33-37, 46, 64 and 70-74 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 10-16, 31, 38-42, 44, 45, 47-53, 57-63, 65, 66 and 68 is/are rejected.
- 7) ☒ Claim(s) 6, 17-19, 43 and 54-56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 12-14, 31, 49-51 and 68 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 12, the limitation "multiplexing, at the primary media gateway controller, outbound signaling content destined for the packet-switched call signaling connections terminated by the signaling gateway, onto the smaller plurality of sessions with the signaling gateway". No support for this feature could be found in the original specification.

Regarding claim 31, the limitation "multiplexing means for assembling outbound signaling content - destined for the packet-switched call signaling connections terminated by the signaling gateway - onto a number of sessions smaller than a number of terminated call signaling connections for transmission to the signaling gateway." No support for this feature could be found in the original specification.

Regarding claim 49, the limitation "multiplexing, at the primary media gateway controller, outbound signaling content destined for the packet-switched call signaling

connections terminated by the signaling gateway, onto the smaller plurality of sessions with the signaling gateway". No support for this feature could be found in the original specification.

Regarding claim 68, the limitation "multiplexing means for assembling outbound signaling content - destined for the packet-switched call signaling connections terminated by the signaling gateway - onto a number of sessions smaller than a number of terminated call signaling connections for transmission to the signaling gateway." No support for this feature could be found in the original specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2616

5. Claims 1-5, 10-11, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allain et al. (US 6,449,259) in view of Osman et al. (US 6,791,971).

For claims 1, 3-5, 10 and 11, Allain et al. disclose communication controller, comprising the steps of:

terminating a plurality of call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway (figure 2, reference 204), where each call signaling connection is packet-switched (col. 11 lines 25-27); and

communicating, over a number of sessions smaller than the plurality of call signaling connections, the signaling content of the call signaling connections from the signaling gateway (figure 2, reference 204) to a primary media gateway controller (figure 2, reference 202)(col. 11 lines 27-41).

However, Berg et al. do not expressly disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the media gateway controller.

In an analogous art, Osman et al. disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the media gateway controller (figure 12B, col. 13 lines 45-47 and col. 14 lines 5-8).

Osman et al. disclose further comprising the step of interpreting, at the primary media gateway controller, the signaling content (col. 14 lines 5-8 as set forth in claim 3); further comprising the step of issuing gateway control commands, from the media

Art Unit: 2616

gateway controller to the media endpoint, based on the signaling content (col. 14 lines 5-8 as set forth in claim 4); wherein the media gateway controller similarly controls multiple media endpoints and similarly communicates with multiple signaling gateways (figure 12B, col. 13 lines 33 to col. 14 line 8 as set forth in claim 5); wherein the media endpoint is a media gateway (col. 14 lines 5-8 as set forth in claim 10); and wherein the signaling gateway and the media endpoint co-reside on the same platform (figure 12B, col. 13 lines 33-50 as set forth in claim 11).

One skilled in the art would have recognized the routing a plurality of packet-switched bearer streams, and would have applied Osman et al.'s exemplary signal flow in Allain et al.'s packet phone gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al.'s method and apparatus for providing a communications service, for communication and for extending packet network functionality in Allain et al.'s communication controller with the motivation being to send a CONNECT message to the destination GK (col. 14 lines 5-8).

For claim 2, Allain et al. disclose wherein the smaller number of sessions is one session (figure 2, col. 11 lines 32-41).

For claim 15, Allain et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises TCP (col. 1 line 56).

For claim 16, Allain et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises UDP (col. 1 line 57).

6. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allain et al. (US 6,449,259) in view of Osman et al. (US 6,791,971) further in view of Dalrymple et al. (US 6,826,272).

For claims 7-8, Allain et al. in view of Osman et al. do not expressly disclose wherein the media endpoint is a media proxy. In an analogous art, Dalrymple et al. disclose wherein the media endpoint is a media proxy (figure 1, reference 105, col. 4 lines 22-24). Dalrymple et al. disclose further the step of forwarding one of the packet-switched bearer streams from the media proxy to a media gateway also controlled by the media gateway controller (figure 2, references 211, col. 7 lines 17-24 as set forth in claim 8).

One skilled in the art would have recognized the media endpoint is a media proxy, and would have applied Dalrymple et al.'s routing a PSTN call to an H.323 handset in Allain et al.'s packet phone gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Dalrymple et al.'s method and apparatus for integrated multimedia call control in Allain et al.'s communication controller with the motivation being to perform a routing from an incoming network PSTN call, through the gateway to the user's H.323 handset (col. 6 lines 25-27).

7. Claims 38-42, 47-48 and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allain et al. (US 6,449,259) in view of Osman et al. (US 6,791,971) further in view of Auerbach et al. (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft).

For claim 38, Allain et al. disclose communication controller, comprising the steps of:

terminating a plurality of call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched (col. 11 lines 25-27); and

communicating, over a number of sessions smaller than the plurality of call signaling connections, the signaling content of the call signaling connections from the signaling gateway to a primary media gateway controller (figure 2, reference 202)(col. 11 lines 27-41).

However, Allain et al. do not expressly disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the primary media gateway controller.

In an analogous art, Osman et al. disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the primary media gateway controller (figure 12B, col. 13 lines 45-47 and col. 14 lines 5-8).

Osman et al. disclose further comprising the step of interpreting, at the primary media gateway controller, the signaling content (col. 14 lines 5-8 as set forth in claim 40); the step of issuing gateway control commands, from the media gateway controller to the media endpoint, based on the signaling content (col. 14 lines 5-8 as set forth in claim 41); and wherein the primary media gateway controller similarly controls multiple media endpoints and similarly communicates with multiple signaling gateways (figure

Art Unit: 2616

12B, col. 13 lines 33 to col. 14 line 8 as set forth in claim 42); wherein the media endpoint is a media gateway (col. 14 lines 5-8 as set forth in claim 47); and wherein the signaling gateway and the media endpoint co-reside on the same platform (figure 12B, col. 13 lines 33-50 as set forth in claim 48).

One skilled in the art would have recognized the routing a plurality of packet-switched bearer streams, and would have applied Osman et al.'s exemplary signal flow in Allain et al.'s packet phone gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al.'s method and apparatus for providing a communications service, for communication and for extending packet network functionality in Allain et al.'s communication controller with the motivation being to send a CONNECT message to the destination GK (col. 14 lines 5-8).

Furthermore, Allain et al. in view of Osman et al. do not expressly disclose wherein an H.323 backhaul channel is used when communicating the signal content of the call signaling connections from the signaling gateway to the primary media gateway controller. In an analogous art, Auerbach et al. disclose wherein an H.323 backhaul channel is used when communicating the signal content of the call signaling connections from the signaling gateway to the primary media gateway controller (page 3, section 1.1 lines 3-9).

One skilled in the art would have recognized the H.323 backhaul channel, and would have applied Auerbach et al.'s backhaul in Allain et al.'s packet phone gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention, to use Auerbach et al.'s signal backhaul protocol in Allain et al.'s communication controller with the motivation being to provide a delivery mechanism (page 3, section 2.1 line 2).

For claim 39, Allain et al. disclose wherein the smaller number of sessions is one session (figure 2, col. 11 lines 32-41).

For claim 52, Allain et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises TCP (col. 1 line 56).

For claim 53, Allain et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises UDP (col. 1 line 57).

8. Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allain et al. (US 6,449,259) in view of Osman et al. (US 6,791,971) and Auerbach et al. (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft) further in view of Dalrymple et al. (US 6,826,272).

For claims 44 and 45, Allain et al. in view of Osman et al. and Auerbach et al. do not expressly disclose wherein the media endpoint is a media proxy. In an analogous art, Dalrymple et al. disclose wherein the media endpoint is a media proxy (figure 1, reference 105, col. 4 lines 22-24).

Dalrymple et al. disclose further the step of forwarding one of the packet-switched bearer streams from the media proxy to a media gateway also controlled by the media gateway controller (figure 2, references 211, col. 7 lines 17-24 as set forth in claim 45).

One skilled in the art would have recognized the media endpoint is a media proxy, and would have applied Dalrymple et al.'s routing a PSTN call to an H.323 handset in Allain et al.'s packet phone gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Dalrymple et al.'s method and apparatus for integrated multimedia call control in Allain et al.'s communication controller with the motivation being to perform a routing from an incoming network PSTN call, through the gateway to the user's H.323 handset (col. 6 lines 25-27).

9. Claims 57-63 and 65-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allain et al. (US 6,449,259) in view of Auerbach et al. (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft).

For claims 57 and 58, Allain et al. disclose communication controller, comprising the steps of:

means for terminating a plurality of call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched (col. 11 lines 25-27); and

means for multiplexing signaling content received over the plurality of call signaling connections onto a smaller number of packet-switched (col. 11 lines 27-41).

However, Allain et al. do not expressly disclose transmission over an H.323 backhaul channel to a media gateway controller. In an analogous art, Auerbach et al.

disclose transmission over an H.323 backhaul channel to a media gateway controller (page 3, section 1.1 lines 3-9).

Auerbach et al. disclose wherein the packet-switched call signaling connections include H.225 Q.931 connections, H.225 RAS connections, and H.245 connections (page 11, section 3.1 ISDN, line 6 as set forth in claim 58).

One skilled in the art would have recognized the H.323 backhaul channel, and would have applied Auerbach et al.'s backhaul in Allain et al.'s packet phone gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Auerbach et al.'s signal backhaul protocol in Allain et al.'s communication controller with the motivation being to provide a delivery mechanism (page 3, section 2.1 line 2).

For claim 59, Allain et al. disclose wherein the smaller number is one (figure 2, col. 11 lines 32-41).

For claim 60, Allain et al. disclose wherein the transport protocol used by the terminating means for the plurality of packet-switched call signaling connections comprises TCP (col. 1 line 56).

For claim 61, Allain et al. disclose wherein the transport protocol used by the multiplexing means for the single session is selected from the group of protocol consisting of TCP, SCTP, and RUDP (col. 1 line 56).

For claim 62, Allain et al. disclose wherein the transport protocol used by the terminating means for each of the plurality of packet-switched call signaling connections

Art Unit: 2616

is selected from the group of protocol consisting of TCP, SCTP, and RUDP (col. 1 line 56).

For claim 63, Allain et al. disclose wherein the transport protocol used by the multiplexing means for the single session is selected from the group of protocol consisting of TCP and RUDP (col. 1 line 56).

For claim 65, Allain et al. disclose means for terminating a packet-switched bearer stream associated with one of the packet-switched call signaling connections (col. 11 lines 25-27).

For claim 66, Allain et al. disclose means for receiving gateway control signaling from a media gateway controller; and control means responsive to received gateway control signaling (col. 11 lines 27-41).

Allowable Subject Matter

10. Claims 6, 17-19, 43 and 54-56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 9, 21-29, 33-37, 46, 64 and 70-74 are allowed.

Regarding claim 9, the prior art fails to teach a combination of the steps of: prior to the forwarding step, modifying the format of the forwarded packet-switched bearer stream within the media proxy, in the specific combination as recited in the claim.

Regarding claim 27, the prior art fails to teach a combination of the steps of:

means for parsing the multiplexed signaling content into multiple protocol data units and transmitting each protocol data unit over its appropriate packet-switched call signaling connection, in the specific combination as recited in the claim.

Regarding claim 37, the prior art fails to teach a combination of the steps of:
a plurality of media endpoints, which comprises both media gateways and media proxies, with each endpoint capable of terminating a plurality of packet switched bearer streams, in the specific combination as recited in the claim.

Regarding claim 46, the prior art fails to teach a combination of the steps of:
prior to the forwarding step, modifying the format of the forwarded packet-switched bearer stream within the media proxy, in the specific combination as recited in the claim.

Regarding claim 64, the prior art fails to teach a combination of the steps of:
means for parsing the multiplexed signaling content into multiple protocol data units and transmitting each protocol data unit over its appropriate packet-switched call signaling connection, in the specific combination as recited in the claim.

Regarding claim 74, the prior art fails to teach a combination of the steps of:
a set of one or more primary media gateway controllers, the set of primary media gateway controllers in communication with each of the signaling gateways through H.323 backhaul channels and each of the media endpoints, the primary media gateway controllers using multiplexed signaling content received from the plurality of signaling gateway to control operation of the media endpoints, in the specific combination as recited in the claim.

Response to Arguments

12. Applicant's arguments with respect to claims 1-19, 21-29, 31-66, 68, and 70-74 have been considered but are moot in view of the new ground(s) of rejection.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN
TN



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600